



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,189	06/30/2003	Michael D. Bowman	03-0431	1188
64722	7590	09/20/2006	EXAMINER	
OSTRAGER CHONG FLAHERTY & BROLTMAN, P.C.			PARRIES, DRU M	
250 PARK AVENUE			ART UNIT	
SUITE 825			PAPER NUMBER	
NEW YORK, NY 10177-0899			2836	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/604,189	Applicant(s) BOWMAN ET AL.	
	Examiner Dru M. Parries	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed June 30, 2006 have been fully considered but they are not persuasive. In response to applicant's argument that Lacy is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Lacy solves the particular problem of how to distribute power in a load control system. Also, Soucy (the main reference) teaches a system with power regulation in an aircraft, however doesn't teach how to efficiently distribute power, but Lacy solves that problem with his method of distributing power.

Regarding the Applicant's assessment of the Lacy reference, the Examiner points out that the primary loads in Lacy are the uncontrolled loads (18, the ones that are always being supplied with power), and the secondary loads (i.e. the direct and indirect loads of Soucy) are the controlled ones (16). Lacy teaches a priority scheme that makes a distinction between which secondary loads are of primary or higher importance (Col. 5, lines 56-64). Also, Lacy teaches a system where the controller always knows how much power is demanded out of each load (primary and secondary), and how much power is being consumed by each load and based on this knowledge determines a power extraction limit for the secondary loads and makes sure to not exceed it ("secondary power extraction", "current operating conditions", and "secondary power extraction limit" – Abstract and Col. 4, lines 32-44). It is inherent that Lacy determines the combined power demand of the secondary loads to determine if the power extraction limit is

Art Unit: 2836

exceeded. Based on the power consumed by the primary loads, the secondary power extraction limit is varied and is monitored by the controller and connects/disconnects secondary loads accordingly. To clarify, Lacy teaches a method of controlling power distribution to loads, and the Soucy reference is modified with this method of load control to create a system that controls distribution of power to loads in an aircraft.

Regarding the Applicant's comparison of Lacy's load control to that in an aircraft setting, similarly Lacy also maintains power to the primary loads (18) while limiting power to the secondary loads (16), therefore if Lacy's load control method was implemented into Soucy's invention then it would result in the claimed invention.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soucy (6,476,510) and Lacy (6,510,369). Soucy teaches a power management system for an aircraft. He teaches plurality of secondary loads (direct - generator, indirect - load, Fig. 1), at least one flight condition sensor (engine speed sensor), and a controller (fuel supply controller & governor) coupled to the plurality of loads and the sensor. Soucy doesn't explicitly teach how the controller will control the system to work efficiently. Lacy teaches a system with a controller and primary (uncontrolled residential) and secondary (controlled residential) loads. Lacy teaches

Art Unit: 2836

a controller that can determine the secondary power extraction, current operating conditions and secondary power extraction limit and can operate the plurality of secondary loads in response to the secondary power extraction and limits. (Abstract, lines 7-12) The controller, while determining current operating conditions determines the primary power extraction (power output to uncontrolled residential loads). Lacy also teaches the controller operating the secondary loads in priority (Col. 5, lines 56-64). He also teaches the controller limiting the operation the secondary loads when the power extraction is greater than the limit (Col. 4, lines 1-14). (Col. 2, lines 59-67; Col. 3, lines 28-36; Col. 4, lines 32-44) It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Lacy's method of power distribution into Soucy's invention so that the engine can supply power to as many loads as possible in the safest possible way, and to make sure that the engine never exceeds its output capabilities which may lead to malfunction.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dru M. Parries whose telephone number is (571) 272-8542. The examiner can normally be reached on Monday -Thursday from 8:00am to 5:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on 571-272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMP

8-28-2006



BRIAN SIRCUS
SUPERVISOR, PATENT EXAMINER
TECHNOLOGY CENTER 2800